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Supplement

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Volume 61 • Number 3 • March 1986

Comparison of Performances of Transfer Students and First-Year Acceptees—Mary Ellen Hartman, Alton I. Sutnick, Daniel G. Hartman, Richard C. Newbold, III, and Adele Kaplan	151
Study of Required Clerkships in Internal Medicine in U.S. and Canadian Medical Schools—William D. Bradford and James R. Schofield	157
Effect of a Cancer Education Program on Student Interest and Learning in Cancer—Antoinette S. Peters, Frank T. Schimpfhauser, John R. Wright, and Monica B. Spaulding	163
Comparison of Theoretically Oriented and Patient-Oriented Behavioral Science Courses—Hoyle Leigh and Morton F. Reiser	169
Communications: A Case Against Mandatory Lecture Attendance—Richard M. Hyde and D. J. Flournoy	175
The Impact of Medical School on the Student with Respect to Interpersonal Relationships and Life-Styles—Steven A. Green and Katsumi Miyai	177
Ethics Committee Simulations for Teaching Medical Ethics—Anthony L. Rostain and Marian C. Parrott	178
Selection and Performance of Medical Students and Residents with Type 1 Diabetes Mellitus—Stephan Kowalyk and Harvey Hechel	181
Editorial: The U.S. Biomedical Research Enterprise: Changing Circumstances and a New Environment	184
Bibliography	186
Letters to the Editor	191
Supplement: AAMC Annual Meeting and Annual Report, 1985	193

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i

Study of Required Clerkships in Internal Medicine In U.S. and Canadian Medical Schools

William D. Bradford, M.D., and James R. Schofield, M.D.

Abstract—The authors studied the teaching of clinical skills and the supervision of clinical education of undergraduate medical students by reviewing students' patient-related experiences in required internal medicine clerkships in the United States and Canada during the 1979-1982 accreditation cycle of the Liaison Committee on Medical Education. The reported patient-related experiences of 180 medical students from 42 medical schools who took histories and performed physical examinations on 2,891 patients formed the basis of this paper. Variability in clerkship length, time worked, supervision, and patient mix suggests that additional quantitative data should be sought on medical students' experiences during the clerkship.

The internal medicine clerkship is recognized by many educators as the keystone of the clinical experience for the undergraduate medical student. In this setting, the unique nature of medical education is realized by the presence of teacher, student, and patient. The clerkship experience permits the student to develop the vital skills of interviewing, observation, and examination that form the basis for sound clinical reasoning, judgment, and decision-making.

Over the past two decades, tremendous pressures have been placed on students in the clerkship. Two significant factors have been (a) the increased number of clinical clerks and allied health students who must be taught and (b) increasing de-

mands placed on the clinical faculty for teaching, patient care, research, and administration. It is not surprising, therefore, that some observers (1) have suggested that medical schools may be neglecting the teaching and supervision of clinical skills. Such a hypothesis is supported in part by a study (2) detailing frequently observed errors in the physical examination by medical house officers.

Because of the great importance of medical students developing proper clinical skills, the Division of Accreditation of the Association of American Medical Colleges has made a study of required clerkship experiences in programs in undergraduate medical education. The basis for the present report is a survey questionnaire on patient-related experiences in required clerkships in internal medicine requested from students in those schools involved in the 1979-1982 accreditation cycle of the Liaison Committee on Medical Education (LCME). The

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students' responses provided quantitative information on duration of required clerkship, supervision, and patients.

Materials and Methods

A total of 180 clerkship questionnaires describing in part patient-related experiences of medical students in required clerkships in internal medicine at 42 schools of medicine in the United States and Canada during the 1979-1982 LCME survey cycle provided data for the study reported here. The 42 schools were selected only on the basis that their accreditation review fell within the 1979-1982 period. The questionnaires, part of the review process, were distributed by each school to varying numbers of medical students in required clinical clerkships and presented to the accreditation team at the time of the site visit. All schools responded, but not all of the questionnaires were complete. Ten questionnaires were illegible and eliminated from this study. A majority of the responding medical students had completed the clerkship when sampled.

Information tabulated included the duration of clinical clerkships, number of clinical clerks per rotation group, manner of assignment of patients, duty hours, a list of assigned patients on which the student completed a history and physical examination, and designation of clinical supervisors who checked "write-ups" and offered constructive criticism. The number of student responses per question varied because not all students answered every question, some responses were not legible and were deleted, and some students had not completed the clerkship when they responded. In order to tabulate the students' experiences with patients with different diseases, the students' logs of patients were categorized according to the major disease systems that are chapter

titles in standard textbooks of internal medicine.

Results

Clerkships ranged from six to 15 weeks in duration. One clerkship was 15 weeks in length, one was 13, 20 clerkships were 12, four were 11, one was 10, two were nine, eight were eight, and five were six weeks.

A vast majority of the medical students reported working long hours, although considerable variability occurred from school to school and student to student. The 170 students who reported their hours stated that they worked a total of 1,762 hours daily (a mean of 10.4 hours per day) and a total of 11,522 hours weekly (a mean of 67.8 hours per week).

Of the 180 students who responded regarding the assignment of patients, 129 (72 percent) reported that patients were assigned to them on rotation within their clinical group. Sixty-one students (47 percent) noted that patients were assigned by residents (excluding interns), eighteen students (14 percent) were assigned by interns, and nine students (7 percent) selected patients from admission logs or received new patients only the days they were on call. Forty-one students (32 percent) indicated they received new patients by one or more methods, including rotation or assignment by faculty members, residents, or interns.

The number of patient work-ups by each student correlated with the length of the clerkship. Three major groupings of clerkships of 12, 8, and 6 weeks in length were selected for display (Table 1). The range of maximum and minimum patient-related experience varied among these clerkships. The medical student performed work-ups on approximately two patients per week in these clerkships. There was marked variability in the num-